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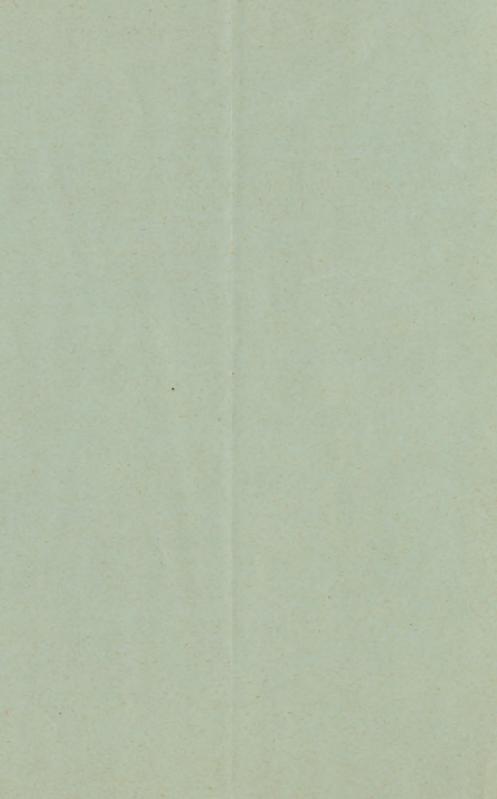
On the Morbid Heredity and Predisposition to Insanity of the Man of Genius.

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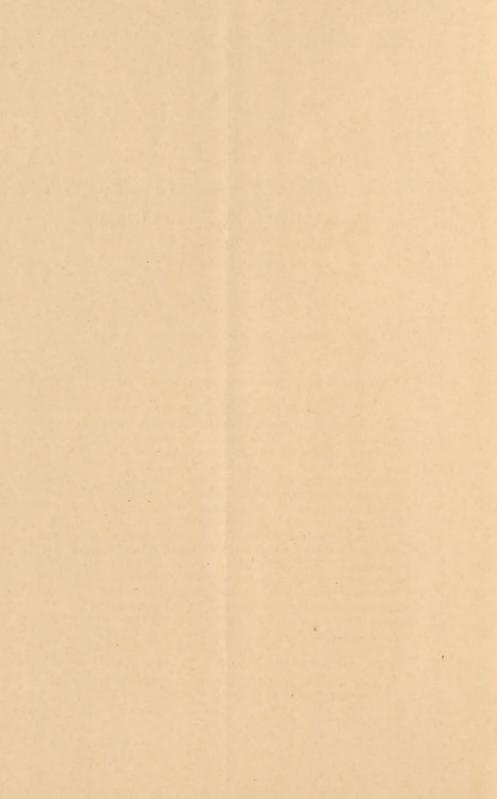
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EN of genius are instruments on which the melody of nature, like sphere music, was made for the benefit and delectation of such as have ears to hear." A more graceful description of the genius would be hard to find in the annals of literature. Maudsley, whose delightful prose has been the envy of many a versatile writer, here aptly expresses in a few words his appreciation of the most gifted class of men, and, when compared with a labored psychological interpretation its beauties will be still more appreciated. In the language of the student of the mind, the quality of genius may be defined as "An exalted mental power, combined with a special instinctive aptitude independent of tuition." The term genius has long enjoyed a wide latitude of application, and it becomes necessary before the men of great gifts can be properly studied or their characteristics rightly defined, to divide them into two primary classes. First, the normal or regenerate, and, second, the abnormal or degenerate men of genius.

The normal man of genius can be dismissed in few words. He is now the highest type of our present state of

¹ Read before the Binghampton Academy of Science, Feb., 2, 1895. ² Maudsley, Physiology of the Mind, p. 64.

evolution and civilization; he is the talented man of our colleges and universities, the leader of his profession and the director of all movements of progress. By force of industry and tact he has acquired those resources of mind which characterize, in larger measure, the greater genius. A superficial comparison would reflect him as a copy in miniature of his degenerate cousin, but a deeper study would establish a wide divergence, both mental and physical. Well developed qualities of originality, attention and abstraction are strangers to his mentality; his heritage bespeaks a normal ancestry and his symmetry of physical contour a healthy organism. The work of the mediocre or even the talented man fades away in the march of ages and sinks into obscurity. A generation or two suffices to obliterate his labors from the history of mankind, and though not having lived in vain, he lived for his time and generation only. But the discoveries of really great men never leave us; their works live on and on and their fame proves immortal.

The study of the abnormal man of great natural gifts is a problem which is as varied as it is interesting and its results as conclusive as the most skeptical could wish. Undoubtedly, the preponderance of great natural gifts of mind, which in themselves insure great renown, entails a corresponding deficiency in other parts of the mental and physical economy, and though in many respects the man of genius may well be the subject of envy, he may in other regards, as consistently be the

object of pity.

The study of this subject involes the comparative consideration of the other varieties of the degenerate elements of the race. The protean divisions of degeneracy comprehend a diverse array of nature's anomalies. The one essential characteristic of this morbid group is the hereditary factor which alike influences each division of the subject. The taint is beyond the power of the individual to rectify, and a faulty ancestry is responsible, atavistically or otherwise, for the perverse character of the members of this group. Their hereditary, adolescent and adult history, together with their remarkable mental and physical resemblance, relegate the genius, the instinctive criminal, the idiot and imbecile, the deaf mute, and some classes of the insane, notably the paranoiae, into a group whose family likeness is striking to contemplate.

Morel's classic division of degeneracy in 1857, was the first attempt to study the subject from a scientific and psychological standpoint. He divided it into five classes from the standpoint of etiology, as follows: toxic, miasmatic, urban, morbid and mixed. His morbid class comprehends all of the primary degenerations mentioned above, and the tendency of modern writers is to restrict

the subject entirely to the group here given.

Within a few years after the publication of Morel's work, Francis Galton drew attention to the subject in its relation to natural selection and heredity. The impetus thus given to the study of degeneracy soon created widespread interest among psychologists and alienists, and the establishment of the science of criminal anthropology on a firm basis during the following decade, opened the portal and paved the way to a more scientific elaboration of the subject, until to-day its various departments command the time and attention of sociologists the world over.

The heritage or family history of the gifted man is a most interesting and complex study. In many cases he is a descendant from an illustrious stock or is a member of an eminent family, as shown by Galton. The Darwin and Herschel families in England, and the Adams, Beecher and Field families in this country, well illustrate this mode of descent, as they have all sent forth generation after generation of illustrious sons, whose works and fame have been world-wide, and who need no obituary in brass or marble to perpetuate their name. But families of geniuses are comparatively few, and the number of illustrious examples of this mode of descent necessarily limited. How much oftener is it stated in history or biography that the origin of this or that grand genius is obscure and worldly; that the clouds and mists of his early life were cleared away by his own indomitable energy and power of application, and that he, early surrounded with obstacles innumerable, arose from darkness and obscurity with as full and grand a glory as attends the rising of the sun.

Again, he may be a degenerate growth from a perverted family stock, inheriting his tendencies from a remote ancestry by atavism, or else one of a large im-

mediate family of degenerates.

Morel. Treatise on Degeneracy. Paris, 1857.
 Hereditary Genius. London, 1869.

You have all noticed the odd boy of the family; the doubtful character; the precocious prodigy; the black sheep of the flock. For example, let us take a respectable farmer's family of four or five children. The pareuts are healthy, sober, poor but respectable people. The children, with one exception, resemble one or the other parent. Their mental endowments do not exceed mediocrity. But this odd boy-this variation from the family likeness, is the one who interests us. He differs from the others greatly and is willful, perverse, moody, impulsive, and perhaps frail and sickly. Marked precocity is his only redeeming characteristic. The ordinary pleasures of childhood which interest his brothers and sisters have no charm for him. He plays alone or wanders off in the fields, seeking solitude in the passivity of nature. He is such a strange boy. His parents do not understand him, and his associates look upon him with awe. As he reaches the adolescent period, he becomes dissatisfied and restless, reluctantly gaining his parents consent to leave home, or failing in that, runs away and turns his face toward some near-by large city. Here his interesting career commences and if followed up is found to attain one of four terminations. First, and most prominent in the order of frequency is an early death. Second, he may help swell the criminal ranks. Third, he may become mentally deranged and ultimately find his way into a hospital for insane. Fourth, and least frequently, he startles the world by an invention or discovery in science or by an original composition of great merit in art, music or literature. He is then styled a genius.

Berti collected records of one degenerate family passing into four generations and found the following list of eighty persons: ten cases of insanity, nineteen of functional neuroses, three criminals, three of great talent, twelve died in childhood, and the family finally became extinct. The original proginator was an insane melancholiac. The Jukes family in this country forms

another good example.

The question now arises—who is responsible for the degenerate heritage? We trace the family history back a few generations. Here in one place is a distinct his-

matter of notoriety. Mercier, Sauity and Insauity; p., 179.

⁶ Precocious children are liable to nervous disorders, and on attaining adult life are liable to instnity. Mercier, Loc. cit.

⁵ The tendency of precocious children to die young has become a

tory of alcoholism; still more remote, a case or two of mental derangement or perhaps a criminal ancestor. The degenerate or modified taint has been so slight as to only very infrequently crop out, but, nevertheless, we have in the family in a more or less direct line of transmission, a vicious taint. In our hypothetical case it is responsible for the odd boy of the family. In another generation it develops an instinctive criminal, or is the predisposing cause of one or more cases of insanity. "It is undoubtedly true that where hereditary taint exists in a family, one member may sometimes exhibit considerable genius while another is insane or epileptic, but the fact proves no more than that there has been in both, a great natural sensibility of nervous constitution. which from outward circumstances has issued differently in the two cases."7

Do not understand me to infer that a genius is born as such. He is primarily a degenerate and as such first sees the light of the world. Physically he is the victim of a number of embryonal vices of development, which in later life become well marked and characteristic and are known as physical stigmata. Mentally he inherits perverted instincts and an exhuberant and fertile intellectuality. His abnormally developed, though resourceful brain cells admit of a psychical inco-ordination, such as is manifested in eccentricities, unstable emotions, and delusions of persecution or suspicion. Furthermore, at birth he is a plastic, flexible mold, ready to receive any and all extraneous impressions that nature consigns to his sphere of life. The character of his objective surroundings, and the guardianship of his youth are responsible in a limited measure for the direction in which his talents develop. If the exuberant, fertile soil of his mentality is not cultivated by education and early training, or modified by the civilizing influences of society, it develops along the crooked lines of degeneracy with which it started at birth. Instinctively develops, so to speak, into a foe of social order; while on the other hand, if unfortunate combinations or stress of circumstances prevail, his intellect early succumbs. That the heritage of the genius, either remote or immediate may be better understood, it may perhaps be well to study the subject of heredity especially in its relation to intellectual development.

In the majority of cases, extent or height of develop-

⁷ Maudsley. Pathology of Mind.

ment is an index of the intellectual powers. Rapidity of development is accompanied by a corresponding intellectual increase, together with an instability of the higher nerve centres which when of high degree, amounts to mental alienation. This is well illustrated in the mental condition of a person suffering from one of the functional neuroses; by the precocity and the premature arrest of development which occurs in idiocy,

imbecility and the degenerate psychoses.

By heredity we mean a reproduction in progeny or off-spring, by transmission or descent, of the salient mental and physical characteristics of the ancestral type. Race after race, individual after individual, have endowed their progeny with a synopsis of the sum total of their objective and subjective experiences plus the similar experiences of their predecessors, whether man or animal. In a more or less varying line they have transmitted down the ages, an impetus, a germ-plasm, a gemmule, a plastidule, a stirp, a micella, physiological units, pangenes, or whatever this potentiality may be termed which has passed from being to being added unto and strengthened in one generation, and weakened or otherwise modified in another, according to the environmental resistance through which it has had to pass.

This hereditary vis-a-tergo, originally primordial in all its salient features, has gradually increased in force and complexity, in harmony with the laws governing natural selection, while this vis-a-fronte, anent the progress made by the application of the laws of science to the resistance of nature, has correspondingly diminished. Thus it is seen that this potentiality which insures, that "like will produce like," when it reaches the individual may be relatively increased or diminished in energy, or otherwise modified by the objective conditions under which it has previously existed. ¹⁶ As a rule its most in-

Mercier. Sanity and Insanity, 1890.
 Weismann. The Germ-plasm, 1882.

¹⁰ Darwin. Origin of species, Sixth edition.

Elsberg. Theory of Heredity, 1874.
 Galton. Natural Inheritance, 1890.
 Nageli. Theory of Heredity, 1884.

Spencer. Synthetic Ppilosophy.De Voies. Intracellular Pagenesis.

¹⁶ This theory of heredity is essentially Neo-Lamarckian, and it is based on the transmission of the effects of use and disuse. It originated with Lamarck and has the support of Spencer and Darwin. The opposing theory of Weismannism, more recently developed, has for its sheet-anchor the non-transmission of acquired characters.

delible impress reflects the immediately preceding generation of ancestors, though frequently atavism occurs, and a reversion to a more primitive type is noted-

In the words of Herbert Spencer, ¹⁷ "Along with the whole generation of which man forms a part, along with its institutions, languages, manners and multitudinous arts and appliances he is a resultant. . . . All those changes of which he is the proximate initiator have their chief causes in the generation he is descended from."

Each individual act or attribute contributes towards or abstracts from the grand total of this transmitted racial or individual likeness, and in succeeding generations aids in forming the racial characteristics or individual peculiarities of our progeny. From the developing organism this impetus receives a certain acquisition of energy or accumulates new characteristics, which when properly directed and uninfluenced by morbid extraneous agents, insures full and normal development

of the embryo to which it is transmitted.

But all theories of heredity must allow for the occurrence of variability, and in this assumption lies the explanation of the degenerate diathesis and atavistic tendency. In terse terms, an individual may start a neurosis or degenerative diathesis in his own life's history, or add to one originated by his parents, or modify an ancestral atavistic vice of development. The prepotent influence of one or the other parent may determine whether the offspring acquire the finely appointed armamentarium of the genius, or the coarse armature of the criminal. When the degenerative element approaches a great degree of morbidity it soon reaches a stage in the family history when the line becomes extinct, thus explaining the well known sterility and barrenness of the degenerate and delinquent classes. 18 Again, the degenerate developmental impetus is misspent or attains so great a degree of velocity as to cause an unnatural diffusion of energy and the individual either fails to properly develop, or else reaches maturity with a damaged and susceptible organism. The accumulation of degenerative vices enables us to explain idiocv and imbecility, while the great rapidity of development readily

¹⁷ Principles of Sociology.

¹⁸ Great law-givers, great philosophers and discoverers in science aid the progress of mankind in a far higher degree by their works, than by leaving a numerous progeny. Darwin. Descent of Man. Chap. v.

accounts for the precocity of the genius and many of the insane. His aberrant mental qualities and his physical

variations from the normal bespeak a like origin.

Passing from the subject of heredity, we will now consider the relation of the genius to his environment. While all animate beings are more or less in constant warfare with the resisting forces of nature, the relations of the finely organized and abnormally developed individual of great gifts comprehend the two extremes of sublime veneration and marked antagonism. The passivity of nature, resplendent and glorious in its latency, prompts our poets to poesy of the greatest merits. What other influence but close association of mind and heart with the beauties of nature induced Bryant to write,

"To him who in the love of nature holds Communion with her visible forms, she speaks a various language,"

or Wordsworth to confess that,

"To me the meanest flower that blows can give Thoughts that do often lie too deep for tears."

On the other hand, the activities of nature react powerfully on the genius as though he were the most sensitive flower in the garden of humanity. His sense of environmental resistance is highly developed and acts and reacts to nature's moods with great regularity. Investigation has shown that meteorological, climatic, and racial factors influence degeneracy to a great degree. The maniacal insane are highly sensitive to barometrical variations, being most disturbed during certain states of the weather. The frequency of convulsions in the epileptic is often influenced by the humidity of the atmosphere The instinctive criminal selects certain seasonable periods in which to ply his vocation. occurrence of mutinies in prisons bears direct relationship to the influence of the weather on the emotional faculties of the prisoner. When the winter proves unusually severe in India crimes increase from 36 to 48 per cent. We can thus reason by analogy and expect to find the genius influenced by the same natural conditions that disturb his brother degenerates.

A high degree of temperature seems to aid in the elaboration of the best mental work of the man, to whom nature, benevolently or malevolently, bestows great natural gifts. Buffon and Voltaire kept their studies artificially warmed throughout the intense heat of summer. Bryon said he feared cold as much as a

gazelle. A well known English writer wrote while reclining in front of the hearth with his head close to the fire, so close that he often singed his hair. Paisello could only compose between six quilts in summer and nine in winter. Milton's muse was notoriously barren in winter.

From a seasonable standpoint it is noted that men of genius make their most numerous observations, accomplish their greatest discoveries or form their best aesthetic productions in the spring, particularly in the month of May when nature is so resplendent in budding possibilities and so conducive to great endeavors. In his study of genius, Lombroso has shown that during the month of February the productions of the genius are practically *nil* while the spring months, notably May, abound in magnificent works in all departments of knowledge.

As regards climate, it has been found that a mild, warm, sunny clime, like Italy, Southern Germany, or France, produces the greatest number master minds and offers conditions under which the work of the genius is

best conserved.

In addition to these factors other influences of a minor import aid in the production and development of the genius. Political struggles, density of population, adaptation of language, elevation above sea level and antiquity of race also manifest influences of great importance in the development of the latent qualities of

mind which are the heritage of the gifted.

While a non-resisting environment is often essential to promote the best interests of these sensitive natures, contrawise a condition of effulgence and ease militates against a continued originality and fertility of resource. Necessity has stimulated many an artistic or original production of great merit, while a pension from royalty has reduced the highest talents to mediocrity. Note the marked impoverishment of genius during the reign of Louis XIV.

Buckle,²⁰ whose philosophical interpretation of scientific and social elements of progress marks an epoch in history writing, says in reference to the royal patronage of Louis, "Men of real genius, great and illustrious thinkers who are the masters and teachers of the human race are thus tricked out with trumpery titles; and after

Lombroso. Man of Genius, p. 113.
 History of Civilization in England, Vol. 1, p. 510.

scrambling in miserable rivalry for the sordid favors of a court are turned into beggars of state who clamor for

their share of the spoil."

The subservience of the man of genius to rank initiates a servility of talent to social exactions, and, in the history of many cases a title of baronetey or a pension from the government has closed the useful career of

many a man of great talent.

Let us now study the mental characteristics of the genius. He is the possessor of great fertility of mind; he glories in an instinctive mental aptitude which enables him to employ faculties of observation and attention without appreciable effort. His prolific and bountiful mentality proclaims his exalted mental powers through which his genius finds expression.

He has marvelous powers of ideation and imagination. The concepts of the literary genius may form faster than his pen can transcribe them to paper. "A smaller tendency to imitate goes hand in hand with a greater tendency to evolve new ideas." ²¹ His imagination is boundless and forms the mental shadow of a real-

ity soon to become manifest in action.

"The genius rejoices in the faculty of imagination which is to be contrasted with the insipidity of the Philistine, and devotes himself with predilection to all sorts of unlicensed pursuits permitted by the unshackled vagabondage of his mind; while he cannot endure well ordered civil occupations requiring attention and constant heed to reality." ²²

Highly developed qualities of attention characterize all gifted minds. In relation to genius, attention may be defined, "As that activity of self which connects all elements presented to it into one whole with reference

to their ideal significance."

His emotional faculties are, in common with other degenerates, very unstable and uncertain in their manifestation. A rain storm would drive Schopenhauer to tears and Chopin would weep over one of his own com-

positions.

He is a man of extreme moods: one moment is exalted, fanciful and filled with brilliant and original conceptions far beyond the scope of the ordinary mind, while the next may find him depressed and melancholy, the victim of an over-developed self-consciousness.

²² Nordau. "Degeneration," p. 21.

²¹ Spencer. Principles of Sociology, p. 80.

The pride, vanity and conceit of the gifted but degenerate man is colossal. His boundless arrogance is aptly described by Tocqueville in referring to literary men of talents, "dans luers écritis l'auteur paráit souvent grand, mais l'umanitè est toujours petite." Chopin deserted his home and wife, because she offered a chair to a visitor before giving him the invitation to be seated. Balzac when wearing a new dressing gown for the first time wanted to parade the streets with a lighted lamp in his hand.

The genius views the world in free objectivity. His mental endowments permit him to withdraw his thoughts entirely from his objective surroundings and concentrate them upon one subject or line of action. This quality of abstraction, familiar to all great minds, is often complete in degree. A personal knowledge of this condition led Schopenhauer to say that,** "The abstraction of genius is a separate, independent existence, a new life which gives its possessor a double personality."

Beethoven would let his hair go several days without dressing and would often promenade the parks and streets deeply involved in abstract thought. Lord Beaconsfield says,24 "When meditative I am not always sure of my own identity or even existence, for I have found it necessary to shout aloud to be sure that I lived." Hegel calmly finished his "Phaenomenologie des Geistes" at Jena on the 4th of October, 1806, without being aware of the battle raging about him. Goethe made observations and experiments for his theory of color during the war in the Champagne amid the bustle of camp life and the thunder of battle. Though his patience was often sorely tried and his life continually in danger, he remained undisturbed through-Many more historical illustrations of this mental quality of genius could be given, but the above suffice to well show its character. Indeed, examples of this faculty are so numerous among gifted men that several entertaining chapters might be written on this part of our subject

The perversity of the genius is expressed by a medley of idiosyncrasies of taste and habit. He may prefer to go hatless or bootless; to sleep on a board or take his meals tanding. He turns night into day and day into

²⁸ Democratie. Vol. xiv., p. 139. Paris, 1835.

 ²³ Essay on Genius.
 ²⁴ Beaconsfield. Contarini Fleming.

night, and ostracises himself from his friends and family

without cause or provocation.

Many men of versatile talents have been addicted to the abuse of alcohol. Alexander, Severus, Tasso, Coleridge and Gluck died of delirium tremens. Socrates, Seneca, Cato, Addison, Burns, Lamb and Poe were chronic alcoholics. One Italian scientist never accomplished anything when sober. Another of talents, a German poet, declared that only a genius could properly enjoy alcoholic beverages. Few people, however, will agree with this eccentric old German, as others besides men of genius appear to delight in the worship of Bacchus.

Great genius is incompatible with great happiness, says Lombroso, the Italian criminologist. The objectiveness of his exterior greatly antagonizes his intrinsic hyperæsthetic sensibilities; he is out of touch with his environment; he lives alone with his personality.

Genius, in common with insanity, is also characterized by marked precoeity or its opposite extreme, youthful dullness, though rarely the latter. Many musical prodigies executed and composed before the age of ten, notably, Meyerbeer, Mendelssohn, Mozart and Beethoven. A large number of literary geniuses wrote works of merit previous to fifteen. We note Dante, Tasso, Goethe, Pope, Bryant and Byron among the poets, and Pascal, Bossuet, Comte, Voltaire, Hugo, Buckle and Fiske among prose writers. Linneus, Boccacio, Volta, Burns, Balzae and Edison were dullards during youth. These lists might easily be quadrupled, as only the more noted and familiar names are mentioned by way of illustration.

A remarkable predisposition to functional neuroses and an especial frequency of the physical degenerative diatheses form another analogy between genius and insanity. Both are characterized by unstable or diseased higher nerve centres, upon which a definite neurosis is readily engrafted. Thus epilepsy, chorea, neurasthenia, paralysis in various degrees, rickets, phthisis, gout, rheumatism, Pott's disease, and other members of the neurotic and degenerate group occur with remark-

able frequency among gifted men.

Though the genius be acutely sensible to extraneous influences, though his life be marked with predisposition to disease and premature decay, and flavored with a wealth of trouble and unhappiness, he is in like remark

able for his long tenure of life. The extraordinary impetus he received as an heirloom at birth carries him on beyond the allotted time and thus insures the greatest good to posterity. The number of gifted minds who passed the ninety-year post is long and interesting. Xenophon, Cato, Michael Angelo, Von Moltke, and the elder Adams died at ninety. Chevreul 103, Titian 99, Hobbes 92, and Diogenes 91, all lived to pass ninety. The octogenerian list forms a brilliant array of talent, and is made up in part by such names as Voltaire, Hugo, Franklin, Tallyrand, Goethe, Kant, Newton and Holmes. The septuagenerian register contains scores of names of whom Galileo, Rossini, Emerson, Darwin and Locke are representatives.

Within the past two years an illustrious array of men of talent and genius have ended a career of studious research or general usefulness extending over three-fourths of a century. The obsequies of Billroth, Brown-Sequard, Charcot, De Lesseps, Holmes, Helmholtz, Parkman and Tyndall are still fresh in our memory.

Among those who died young, several illustrious examples appear, as will be seen by the following group, all of whom failed to reach the age of forty years: Mozart, Mendelssohn, Raphael, Burns, Keats, Poe and Byron. Literary men whose habits of life predispose to premature decay, artists and musicians make up the major part of this group.

Several of the most remarkable men of the nineteenth century are living to-day at an advanced age. We may mention Gladstone at 86, Leo XIII at 85, Bismarck at 80, Spencer at 76, Crispi at 75, Virchow at 74,

Pasteur at 73, and Huxley at 72.*

An indulgence in mysticism, symbolism, and things occult and æsthete stimulate the fancy of the genius to productions, at times, of questionable utility or doubtful propriety. This characteristic is considered by Nordau 25 as symptomatic of degeneracy in its various forms, and our recent information respecting Oscar Wilde's vagaries of moral sense seems to confirm this statement in part.

From our consideration of the predominant mental symptoms of genius we now turn to those mental manifestations which express a still greater degree of morbidity. We first come upon a class of eases called mat-

^{*} Died, June 29. 1895.

²⁵ Nordau. "Degeneration."

toids by Lombroso. The status of the mattoid bespeaks a connecting link between sanity and insanity. group is made up of "gifted cranks," queer, odd, and eccentric geniuses, who, though actually insane, retain a high degree of intellectuality. As a rule these "mattoids" are hereditary neuropaths dominated by delusions of persecution, suspicion or grandeur, or imbued with ideas of universal reformation. The line of demarcation between the character of the mattoid and the variety of insanity most commonly found in the genius, namely, the so-called moral insanity, is necessarily indistinct and undefinable. The doubtful occurrence of a moral insanity as a definite mental disorder is now generally admitted, for in the majority of cases it is only a symptom of one of the involutional or degenerative psychoses. Therefore, in a diagnosis of the predominant mental infirmity in men of genius, the term should be omitted and only the broader symptomatic classification be considered.

It is evident from what has already been said on the subject, that genius in many cases is on the threshold of insanity, and that only a slight increase in the instability of a given case would inevitably result in mental collapse.

Hammond 27 says that "The discrimination of the very highest flights of genius from insanity is a difficult and at times an impossible undertaking, for they may

exist in one and the same person."

Nisbet 28 observes, "Genius and insanity are but different phases of a morbid susceptibility of or want of

balance in the cerebro-spinal centres."

Diderot,29 himself a degenerate, passionately exclaims, "Ah, how close the insane and genius touch! they are imprisioned or enchained, or statues are raised

to their memory."

The fact that degenerative taint in a progenitor, originally produced by alcoholism, epilepsy, syphilis, insanity, or other morbid factors, may give rise to cases of insanity in one branch of the family and genius in another, and that whole families of degenerates comprised of talented, imbecile, and criminal members have often existed, shows the intimate relationship of the predisposing cause.

Treatise on Insanity.
 Insanity of Genius. London, 1891. 29 Dictionaire Encyclopedique.

With the imperfect and wholly inadequate material at my command, I have endeavored to arrange the insane men of genius into several classified mental groups, thus attempting to diagnose the variety of the mental disorder manifested by each individual. Owing to the suppression, by the majority of biographers, of any allusion to a deteriorated mental state, and to the obscure description of the condition when too palpable to pass unnoticed, the results of an attempt at classification have not been more than moderately satisfactory. A few years' experience among the insane, has convinced me that a correct diagnosis of cases of mental disorder even by a personal examination is a problem of great uncertainty. It is, therefore, evident that the results obtained in attempting to classify the insane men of genius are still more unreliable, because the material upon which the diagnosis is based is derived from the biased writings of biographers and the opinions of the contemporary writers. Nevertheless, the attempt is made to divide the cases into the primary forms of mental disorder.

Comte, De Musset, Lamb, Lenau, Lucretius, Moliere, ³⁰ Richelieu³¹ and Shelley were subject to mania in one or

other of its various forms.

Michael Angelo, Burns, Beethoven, Coleridge, Cromwell, Chopin, Cowper, Chatterton, Gray, Johnson, Lotz, Leonardi, Mill, Newton, Poe. Rossini, Raphael, Rosseau, Schiller, Schuman, Schopenhauer, and Tasso were victims of melancholia.

Baudelaire, Burke, Gogol, Linné, Pascal, Southey and Swift became demented in latter life, or suffered from

paralytic dementia.

Pausanias, Bruno, Keats and Hoffman were cases of

delusional insanity or paranoia.

Alfieri, Cæsar, Charles V., Flaubert, Handel, Mahommed, Moliere, Napoleon, Pascal, Petrarch, Peter the Great, Richelieu and Wellington were epileptics.

Biran's, Flaubert's, Johnson's and Renan's mental disorder is best expressed by the "folie du doute" of

the French.

Amperé, Byron, Boyali, Brougham, Cardan, Descartes, Fodera, Gounod, Goethe, Hugo, Hastings, Haller, Mozart, Mendlessohn, Pope, Socrates and Ricci were more or less dominated throughout life by hallucinations

⁸⁰ Epileptic Mania.

or delusions, or else manifested other symptoms of men-

tal vagary.

Many men of genius committed suicide. In some cases it was a sequel of mental disorder. The methods adopted are various, and almost cover the entire range of possible means of self destruction. Seneca and Lucan by bleeding; Lyeurgus by starvation; Demosthenes, Hannibal, Lucretius and Chatterton³¹ by poison; Cato, Brutus, Cassius and Marc Antony by sword or dagger; Blount, Balmaceda and Boulanger by shooting, and Nerval and Mainlander by hanging.

The following made one or more unsuccessful attempts at self-destruction: Clive, Cowper, 31 Cardan, 31 Chateubriand, Fisher, Lessman Lamartine, Dupuytren, Rous-

seau and Schuman. 31

Petrarch, Mozart, Peter the Great, Tacitus, Campbell, Donizetta, Volta, Hugo and Marcadante, were fathers of one or more idiotic or insane children, while fully seventy per cent. of geniuses have had insane relatives in

their immediate family.

The relation of genius to criminality is as striking as its close approach to insanity, and more firmly cements the bond of union existing between this remarkable trio of degeneracy. A study of the genealogy of almost any degenerate genius discloses the fact, that the family has from time to time been represented in the criminal ranks. Marcus Aurelius, Pericles, Cardan, Petrarch, Petrarch, Luther, William Penn and Rembrandt were fathers of one or more criminal children. The houses of Charles V., Frederick I. and Peter the Great, developed gifted, insane and criminal members. In a measure, these anomalies can be accounted for by consanguinity in marriage, lifelong dissipation and unusual stress of circumstances, yet there remains the faulty and degen erate ancestral basis upon which the above mentioned extraneous influences engrafted vice after vice until the lines became extinct.

From the mental we now turn to the physical points of dissimilarity between normal and abnormal man. Here the relationship to one another of the different members of the latter division is even more marked. These variations from the normal type have been observed from the earliest period in the authentic history of man. Homer portrays the villainy of Thersites, and

³¹ Melancholia with suicidal impulses. ³² Insane diatheses also present in family.

deems his picture incomplete without a description of his person. Pope's version thus:

"His figure such as might his soul proclaim,
One eye was blinking and one leg was lame,
His mountain shoulders half his breast o'erspread,
Thin hair bestrewed his long misshapen head,
Spleen to mankind his envious soul possest."

The physiognomy of the degenerate, as typified by the criminal, is highly characteristic. While the mental condition of the genius is closely allied to certain forms of insanity, his physical state more nearly approaches that of the criminal. The head presents the greatest deviations from the normal and is markedly asymmetrical. In the majority of cases, it is broad or brachycephalic with an increased cranial capacity. Extreme dolichocephalvis frequently observed, especially in the delinquent classes. Hydrocephalus was noted in Milton, Gibbon, Cuvier, Linnaeus and many others, while microcephaly characterized, Descartes, Dante, Foscolo, Gambetta and Shelly. Cerebral anomalies of structure are found very frequently in men of genius, often analogous in position, extent and gravity to similar conditions in the brain of the instinctive criminal and degenerate in sane. Thus occur meningeal thickenings, ventricular ædema, localized cerebral atrophy and softenings, convolutional hypertrophy, and anomalies of the frontal and parietal convolutions and fissures.

In the majority of cases the hair of the scalp is long and abundant, while that of the beard is thin and scanty. The face is large and wide, the cheek bones prominent, the teeth irregular or crenated, and the lower jaw heavy, protruding and prognathic. The eves are unusually far apart or close together, their individual qualities in the genius have formed themes for poets and biographers from time immemorial. The majestic brilliancy of the orbs of the Macedonian Alexander and Pompey the Great are said to have stirred the hearts of armies and to have filled the souls of their opponents with fear. Shellev's eves were indicative of his wayward genius, his biographer describing them as "large and animated with a fiery dash of wildness." Carlyle's description of the eyes of Coleridge is well known. 33 "His deep eyes of light hazel hue, were as full of sorrows as of inspiration; confused pain looked mildly

²³ Carlyle. Life of Sterling.

from them as a kind of mild astonishment." The observant, cunning, steely eye of the criminal; the wild, haggard, roving eye of the maniac, and the expressionless eye of the idiot will be re-called in this connection while from the opthalmologists we learn that strabismus, hemianopsia and numberless errors of refraction are very common among the degenerate classes.

The ears are misshapen and irregular; their lower lobe is elongated; they stand out from the head like wings, and the Darwinian tubercle is fairly constant in

occurrence.

A very frequent abnormality is a prominent palatine ridge running from before backward, easily felt on the roof of the mouth.³⁴

The shoulders in the majority of cases are stooped and rounded; lateral and angular spinal curvature is comparatively common, while both upper and lower limbs are long in proportion to length of waist. The feet are large and prehensile. The fingers long and tapering, with an exceptionally long or short index or little finger and a short, immobile thumb. Mancinism, or left handedness, now regarded as a symptom of atavism or reversion of type, is often met with in the genius. Aristotle, Tiberus, Cato, Livy among the noted ancients, and Lamb, Michael Angelo, Raphael and Cardan among moderns serve as examples, and form a double quartette of illustrious mancinists. Cutaneous anæsthesia, facial pallor and bodily emaciation, characterize the genius as well as the lowers members of the degenerate family, A variation from the family likeness or a non-resemblance to parents betokens the atavistic degenerate. Thus Cæsar, Napoleon, Voltaire, Humboldt and many others resembled neither father nor mother.

The universal physiological law asserting that excess in development of one part of the economy is counteracted by deficiency in another is well illustrated in the genius. In botany it is observed that plants which grow luxuriantly or attain an unusual size rarely flower. In the majority of cases great giants are imbeciles or have a low degree of mental power. Horace, Alexander, Aristotle, Plato, Epictetus and many others among the ancients were pigmies physically and giants mentally. Shortness of stature is also recorded of the

³⁴ Dana. Medical Record, 1894.

majority of modern men of great talents. In this list we find Gibbon, Spinoza, Linnaeus, Moore, Campbell, Meissonnier, Mozart, Beethoven, Goldsmith, Heine, Balzac, Browning, Ibsen and scores of other names of evual note. A much more extended list is given by Lombroso (loc cit) who also names the following as being of tall stature: Goethe, Bismarck, Dumas, Washington, Voltaire, Johnson, Carlyle and Tennyson.

There appears to be a special group of American alienists, with a noticeable antipathy toward the Italian school, who attach slight significance to the subject of degeneracy as developed by criminal anthropologists, and incidentally aver that genius, criminality and their physical stigmata are purely accidental. They affirm that genius is no more a psychosis than blank ignorance, and that its concomitant neurosis is an accidental graft. Such statements entirely overstep the bounds of reason and relegate the labors of Maudsley, Galton, Lombroso, Benedickt, Nordau, Nisbet, Morel and the modern school of criminal anthropology to a very low degree of merit. They fail to properly distinguish between theory and fact, and betray an incredulity toward the results of modern scientific research that is, to say the least, very lamentable.

From the foregoing study it will be seen that genius, in the majority of cases, is a degenerative psychosis upon which is often engrafted a functional neurosis and a variety of physical stigmata which point towards a reversion of type. The difference between a degeneration and a neurosis is that the former is a reversion form and the latter a perversion of the normal type, or, in the words of Maudsley, 35 "Degeneration means, literally an unkinding, the undoing of a kind, or a change from a higher to a lower kind. That is, from a more complex to a less complex organism." In closing it only remains to be said, "That scholars and savants may by acquired knowledge, by the toilsome effort of study and research, make themselves a lofty position and gain the crown that science bestows upon her votaries. But the true genius is a born kind of an intellectual world invested by birth and nature with the royal prerogative." He is a magician whose wand swavs all lesser intellects and whose innovations in science and art reach into the subtle powers of the sublime. Consciously

³⁵ Body and mind.

or unconsciously he is the natural enemy of conservatism, superstition and traditional methods; he is the apostle of reform and the advance agent of progress and civilization. To forestall and anticipate future events is the special prerogative of the genius. His master mind outlines some great and noble plan which the lesser intellects of future generations fill in, com plete, and approve.

"This beaten highway is always open, and the difficulty is not to find those who will travel the old road, but those who will make a fresh one. Every age produces in abundance men of sagacity and considerable industry, who, while perfectly competent to increase the details of a science, are unable to extend its distant

boundaries." "

Thus the genius is often unrequited during his life. He may build the foundations; alone and in silence, perhaps in obloquy, without sympathy or assistance, he lays the corner-stone. Contemporaries may ridicule; royalty may persecute; support may be entirely withheld, but the qualities which characterize true genius remain unaltered. Faithfully and wisely he draws the plan; labors throughout his long tenure of life; sacrifices pleasure and comfort to an insatiable ambition, and perchance death finds the foundation barely complete. Skilled architects of future generations rear the edifice and reap the reward, while the designer slumbers in dust, unrequited and forgotten. But there comes a time long years afterwards, when the selfish contentions of the builders have ceased and been forgotten; when a grateful posterity recognize the genius and merit of the original designer and fittingly reward his name and works which alone remain.

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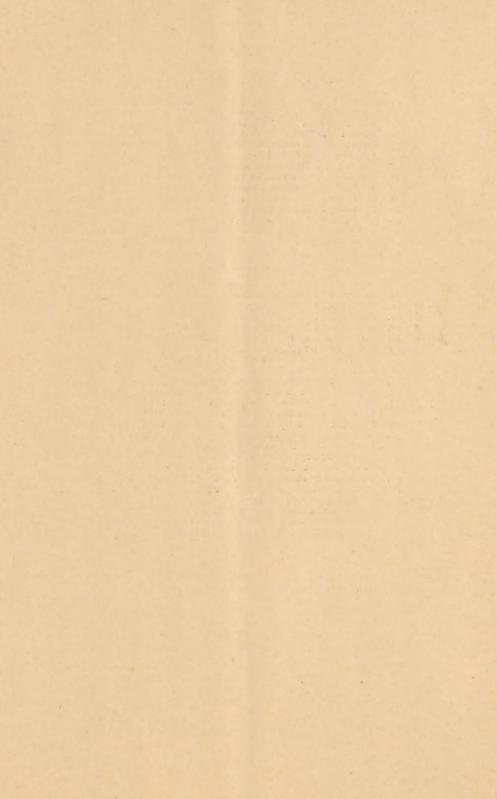
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